IPL PRO Device Interface Communication Sheet

This document provides additional assistance with wiring your Extron IPL PRO enabled product to your device. Different components may require a different wiring scheme than those listed below.

For complete operating instructions, refer to the user's manual for the specific Extron IPL PRO enabled product or the controlled device manufacturer supplied documentation.

Device Specifications:

Device Type:	Video Projector
Manufacturer:	3M
Firmware Version:	N/A
Model(s):	X31,X36,X46

Tested on the Following Software and Firmware Versions:

IP Link Pro Control Processor Firmware	MediaLink Plus Controller Firmware	GC (Plus, Pro) Version
1.03.0000-b002	1.00.0000-b003	1.2.1.5

Version History:

Driver Version	Date	Notes
1_0_0	1/30/2015	Initial version.

Driver Notes:

- User Defined command takes a string parameter and sends the string out of the port.
- Only Power Command will be sent to the device when it is Off & Cooling down.

Driver Timings

- Recommended repeat rate for this driver is .1 seconds

Control Commands & States:

Aspect Ratio	Normal	4:3	16:9
	16:10	14:9	
Audio Mute	On	Off	
Auto Image	None		
Computer 1 Audio	Audio 1	Audio 2	Audio 3
	Off		
Computer 2 Audio	Audio 1	Audio 2	Audio 3
	Off		
Freeze	Normal	Freeze	
HDMI Audio	Audio 1	Audio 2	Audio 3
	Audio HDMI	Off	
Input	Computer IN 1	Computer IN 2	HDMI
	Component	S-Video	Video
	USB Type A	LAN	USB Type B
Lamp Mode	Normal	Eco	
LAN Audio	Audio 1	Audio 2	Audio 3
	Off		
Picture Mode	Normal	Cinema	Dynamic
	Board(Black)	Board(Green)	Whiteboard
	Daytime		
Power	On	Off	
Standby Audio	Audio 1	Audio 2	Audio 3
	Off		
S-Video Audio	Audio 1	Audio 2	Audio 3
	Off		
USB A Audio	Audio 1	Audio 2	Audio 3
	Off		
USB B Audio	Audio 1	Audio 2	Audio 3
	Off		

User Defined Command	None		
User Defined String	String		
Video Audio	Audio 1 Off	Audio 2	Audio 3
Video Mute	On	Off	
Volume[1]	Increment	Decrement	

[1] Must select an Input to change the Volume

Status Available:

Aspect Ratio	Normal	4:3	16:9
	16:10	14:9	
Audio Mute	On	Off	
Computer 1 Audio	Audio 1	Audio 2	Audio 3
	Off		
Computer 2 Audio	Audio 1	Audio 2	Audio 3
	Off		
Connection Status [RP]	Connected	Disconnected	
Device Status	Air Flow Error	Cold Error	Cover Error
	Fan Error	Filter Error	Lamp Error
	Normal	Temp Error	
Filter Usage	Hours		
Freeze	Normal	Freeze	
HDMI Audio	Audio 1	Audio 2	Audio 3
	Audio HDMI	Off	
Input	Computer IN 1	Computer IN 2	HDMI
	Component	S-Video	Video
	USB Type A	LAN	USB Type B
Lamp Mode	Normal	Eco	
Lamp Usage	Hours		
LAN Audio	Audio 1	Audio 2	Audio 3
	Off		
Picture Mode	Normal	Cinema	Dynamic
	Board(Black)	Board(Green)	Whiteboard
	Daytime		
Power	On	Off	Cooling Down
Standby Audio	Audio 1	Audio 2	Audio 3
	Off		

S-Video Audio	Audio 1 Off	Audio 2	Audio 3
USB A Audio	Audio 1 Off	Audio 2	Audio 3
USB B Audio	Audio 1 Off	Audio 2	Audio 3
User Defined String	String		
Video Audio	Audio 1 Off	Audio 2	Audio 3
Video Mute	On	Off	
Volume Status[1]	Number		

[1]Must select an Input to get the Volume

[RP] Connection Status is based on the following string: \xBE\xEF\x03\x06\x00\x19\xD3\x02\x00\x00\x60\x00\x00

Cable and Adapter Requirements:

Captive Screw to Female DB9 RS-232 Serial Cable

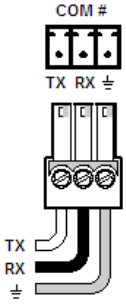
Notes for the Device:

- Projector and driver also support the additional 4800, 9600 and 38400 Baud rate.

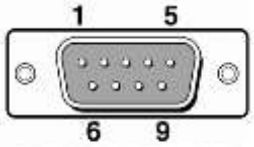
Serial communication:

Port Type:	RS-232	**Parity:**	None
Baud Rate:	19200	**Stop Bits:**	1
Data Bits:	8	**Flow Control:**	None

Pin Assignments Diagram:



Signal	Main Cable	Pin	Signal
TxD	→	2	RxD
RxD	←	3	TxD
GND	—	5	GND



RS232 DB9 Male
Projector

General Notes:

Network communication:

Port Type:	Ethernet
Default Port:	23
Multi-Connection Capabilities:	Undetermined
Port Changeability:	Yes
Logon Credentials Supported:	Yes

Ethernet Driver Configuration Description :

Please refer to user manual for settings and changes to the network communication parameters.

Notes for the Device:

To enable Ethernet control go to the projector homepage by typing the IP address of the projector into your internet browser. Then, click the Enable check box to open Network Control Port 1 (Port 23). Enable is the default setting. To enable Authentication check the Authentication box, the default setting is Disable.